

Application Number 10/717,398
Response to Office Action mailed October 1, 2007

REMARKS

This amendment is responsive to the Office Action dated October 1, 2007. Applicant has amended claims 30, 31, 36, 40-42, and 47. Claims 30-50 are pending.

Claim Rejection Under 35 U.S.C. § 101

In the Office Action, the Examiner rejected claims 30-50 under 35 U.S.C. 101 stating that the claimed invention is directed to non-statutory subject matter.

Claims 30-46

In rejecting claim 30, the Examiner states that the "claims begin by discussing a system" but that "the body of the claim discusses the specifics of [a] software module." The Examiner then states that the Applicant is attempting to claim via a single claim to two different statutory classes of inventions in violation of 35 U.S.C. 101 (Office Action, pages 2-3).

Applicant has amended claim 30 to make clear that the claim is directed to a computer-implemented system comprising a computing device and a value modeler software module executed by that computing device. Claim 30 is directed to a single statutory class under 35 U.S.C. 101, i.e., a machine. Applicant therefore request prompt withdrawal of the rejection of claims 30-46.

Claims 47-50

Applicant notes initially that the Examiner rejected claims 30-50 but only provides comments directed only to independent claim 30. Applicant submits that the rejection of claims independent 47 and dependent claims 48-50 under 35 U.S.C. 101 was in error. Applicant respectfully asserts that the Examiner failed to follow proper examining procedure for computer-related inventions as set forth by the Office's Examination Guidelines for Computer-Related Inventions (herein, "Guidelines"). Claims 47-50 are clearly directed to a computer-readable medium encoded with instructions that execute on a processor. When properly viewed, Applicant's claimed elements constitute "functional descriptive material." As defined by the Guidelines set forth by the Office, "functional descriptive material" consists of data structures and computer programs which *impart functionality* when encoded on a computer-readable

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medium. According to the Guidelines, when functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and constitutes statutory subject matter under 35 U.S.C. 101, and the unique features of the data and computer programs must be considered when determining patentability of a claim. Consequently, Applicant requests prompt withdrawal of the rejection of claims 47-50.

Claim Rejection Under 35 U.S.C. § 112

In the Office Action, the Examiner rejected claims 30-50 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Again, as stated above, Applicant notes initially that no basis for the rejection is provided by the Examiner with respect to claims 47-50. As above, Applicant requests prompt withdrawal of the rejection of claims 47-50, as these claims are clearly directed to only a single statutory class.

Again, as stated above, Applicant has amended claim 30 to make clear that the claim is directed to a computer-implemented system comprising a computing device and a value modeler software module executed by the computing device, thereby addressing the Examiner's rejection by providing a structure or hardware that performs the functions. Applicant therefore request prompt withdrawal of the rejection of claims 30 and those claims rejected on the same basis which depend on claim 30.

Applicant has further amended claims 30 and 41 to replace the conditional "if" with an unconditional and definite "when." Applicant submits that claims 30 and 41, as amended, particularly point out and distinctly claim the subject matter, as required by 35 U.S.C. 112, second paragraph.

Applicant has also amended claim 36 and 41 to correct the limitations having insufficient antecedent basis. Applicant submits that claims 36 and 41, as amended, particularly point out and distinctly claim the subject matter, as required by 35 U.S.C. 112, second paragraph.

With respect to claim 37, however, Applicant disagrees with the Examiner that there is insufficient antecedent basis for the limitation "the computed total costs." Line 1 of claim 37 provides antecedent basis by stating that "the value modeler computes one or more total costs,"

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which lines 2-3 of claim 37 reference as "the computed total costs." Applicant, therefore, requests withdrawal of the rejection with respect to claim 37.

Considering the above amendments and arguments, Applicant requests immediate withdrawal of all rejections under 35 U.S.C. 112.

Claim Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 30-31, 33, 40-41, 47-48 and 50 under 35 U.S.C. 102(c) as being anticipated by Knight (US 2004/0024622). Applicant respectfully traverses the rejection to the extent such rejection may be considered applicable to the amended claims. Knight fails to disclose each and every feature of the claimed invention, as required by 35 U.S.C. 102(c), and provides no teaching that would have suggested the desirability of modification to include such features.

For example, amended claim 1 recites computer-implemented system comprising a computing device and a value modeler software module executed by the computing device, wherein the value modeler software module processes an information flow model that models the flow of printed information through a process of an enterprise, wherein calculates a metric of improvement for the process when at least one printed information component associated with the process is digitized by scanning the printed information component to produce a digitally encoded version of the printed information component and the digitally encoded version of the printed information component is subsequently used within the process in place of the printed information component.

Instead, Knight generally describes a system for automating business processes (Abstract). Knight provides that a business process "can be considered a series of software interactions that use various tools to manipulate core business functions." (paragraph [0031]) The Knight system contemplates that business processes available for automation are "typically those that will be repeated numerous times," and continues by providing an example business process related to hiring a new employee (paragraph [0036]). Hiring a new employee, Knight explains, involves numerous functions that may be performed by disparate departments, software programs, and/or people within the enterprise (paragraph [0036]). The Knight system therefore provides two primary components, one component to create and manage a business process and

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another to provide a common interface between all of the software applications being used (paragraph [0033]).

Knight states that the first component involves the automation of the business process, which may include "implementing business service logic 52 to coordinate activities between layers 60 and/or business applications 70, obtaining a program 70 to implement a function, and/or associating a group of persons with a function." (paragraph [0039]) Knight clarifies further, stating "in certain embodiments, the pertinent business process can be automated by implementing them as software applications." (paragraph [0039]) The second Knight component concerning the common interface may, for example, involve providing a common web interface between the software applications being used and a user. (paragraph [0033]) By employing server 40, the Knight system accomplishes the second component by untying the presentation of data for a business process from any one business application. (paragraph [0033]) Knight can fairly be said to be no more than software designed to identify disparate software applications involved in a single business process and a server that ties disparate software applications together to "automate" or "digitize" a business process by way of gathering data from each application and presenting the data via a common interface.

The Examiner in rejecting independent claim 30 and 47 therefore improperly construes Knight to read on Applicant's claims invention. As an initial observation, Applicant submits that Knight reference to "digitizing" a business process refers to the general utilization of a computer to aid the business process. For example, Knight in paragraph [0007] mentions "digitizing" a business process without any detailed explanation of what digitizing a business process entails. Knight subsequently describes the implementation of software application and the general coordination and presentation of data from the software applications.

Applicant's original claim 37 requires modeling of the flow of information through a process of an enterprise and calculating a metric of improvement for the process if at least one information component associated with the process were digitized. Applicant presumes the Examiner, in rejecting claims 30 and 47, intends to suggest that Knight's "digitizing" of a process inherently involves modeling the flow of information through that process, but this improperly construes Knight.

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Knight merely describes a system for *identifying* a process, not the flow of information through a process, and joining disparate portions, e.g., applications, of the process together such that these portions can present information via a common interface, which Knight suggests may increase the consistency of implementing a process across a large enterprises (Background paragraph [0002]). Knight is unconcerned with the actual flow of information, and suggests, in order to automate a business process, that one merely need to find a suitable software application to perform a function. Knight fails to disclose, and in fact, even suggest a value modeler software module that processes an information flow model that models the flow of information through a process of an enterprise, as required by Applicant's original claim 37.

The Examiner also misconstrues Knight, for example, when citing paragraph [0007] presumably to reject Applicant's system that calculates a metric of improvement for the process if at least one information component associated with the process were digitized, as required by Applicant's original claim 37. Applicant assumes that the Examiner cites paragraphs [0007] of Knight because this paragraph mentions in passing that the Knight system can be used to "digitalize" a business process. Notably, however, Knight references the word "digital" or any derivative thereof a total of five times, and in all but paragraph [0007], the use of "digital" is not relevant to digitalizing a process (See paragraphs [0016], [0017], [0019], and [0049]). Knight therefore provides no clear teaching that describes the digitalization of a business process other than to suggest that it is the automation of a business process through the presentation of a common interface by which information from disparate software applications can be viewed. Applicant's claimed invention, however, contemplates the effects of digitalizing at least one information component associated with a process. Therefore, the Examiner has improperly construed Knight to read on Applicant's claims by assuming digitalization of a business process can be equated with the digitalization of an information component associated with a business process, as required by claim 1.

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Despite the Examiner's improper construction of Knight, Applicant has amended claims 30 and 47 for purposes unrelated to patentability to clarify the scope of an information component and the process by which an information component is digitized. For example, Applicant has amended claim 30 to require that a **printed** information component is digitized by **scanning** the **printed** information component to produce a digitally encoded version of the printed information component. Moreover, Applicant has amended claim 30 to require that the value modeler software module calculates a metric of improvement for the process **when at least one printed information component associated with the process is digitized by scanning the printed information component to produce a digitally encoded version of the printed information component and the digitally encoded version of the printed information component is subsequently used within the process in place of the printed information component.**

Knight in view of the other cited references does not teach or suggest a value modeler software module that processes an information flow model that models the flow of printed information through a process of an enterprise. Moreover, Knight in view of the other references certainly fails to teach or suggest a method or system that evaluates the affects to the associated process (i.e., calculates a metric of improvement for the process) when at least one printed information component associated with the process is digitized by scanning the printed information component to produce a digitally encoded version of the printed information component and the digitally encoded version of the printed information component is subsequently used within the process in place of the printed information component. Quite simply, Knight is unconcerned with the affects of digitalizing printed information contrary to Applicant's claimed invention, and rather focuses on eliminating discrepancies between implementations of business processes within a large enterprise. Applicant's claimed invention looks to discovering and evaluating instances where digitalization of printed information may be beneficial (Knight Background paragraph [0002] and Applicant's Summary).

For at least the above reasons, Knight fails to disclose each and every limitation set forth in independent claims 30 and 47. As of claims 31-46 and 48-50 respectively depend on claims 30 and 47, each of these claims benefit from the above argument and therefore Knight fails to disclose each and every limitation set forth in claims 30-50. The Examiner, therefore, has failed

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to establish a prima facie case for anticipation of Applicant's claims 30-50 under 35 U.S.C. 102(e). Prompt withdrawal of this rejection is requested.

Knight also fails to disclose many of the elements set forth in Applicant's dependent claims. For example, Applicant's claim 41 requires that the value modeler calculate respective metrics associated with the first information flow model and a second information flow model, and compare the metrics to determine a potential benefit when the information component is digitized. The Examiner again cites paragraphs [0007] and [0016] of Knight apparently because paragraph [0007] mentions the word "digitalization" and paragraph [0016] mentions the word "metric." However, Knight describes a metric as a way of measuring the progress of the process (paragraphs [0025], [0028], [0038], etc.) not as a way of measuring a potential benefit of digitalizing specific printed information components relative to two different flow models let alone **comparing** these metrics, as required by Applicant's claim 41. Knight may compare metrics relating to a single process to determine the efficacy of the automation, but does not disclose comparing metrics related to two different processes or flow models. Knight, therefore, not only fails to disclose any teaching or suggestion to overcome independent claims 30 and 47, but also fails to disclose each and every limitation set forth in many of Applicant's dependent claims.

In the Office Action, the Examiner also rejected:

- (i) claims 32 and 37-39 under 35 U.S.C. 102(e) as being anticipated by Knight (US 2004/0024622), in view of Casati et al. (US 2003/0225644);
- (ii) claims 34-35 under 35 U.S.C. 102(c) as being anticipated by Knight (US 2004/0024622), in view of Humenansky et al. (US 7,072,822);
- (iii) claims 36 and 43-46 under 35 U.S.C. 102(e) as being anticipated by Knight (US 2004/0024622), in view of Charisius et al. (US 2002/0075293); and
- (iv) claim 42 under 35 U.S.C. 102(e) as being anticipated by Knight (US 2004/0024622), in view of Ambler et al. (US 2002/011989).

Applicant submits that each of rejections (i)-(iv) are improperly founded upon the anticipation-type rejection of 35 U.S.C. 102(e) when each of these rejections more properly lies under the obviousness-type rejection of 35 U.S.C. 103. The Examiner in each of these rejections appears to recognize this fact by stating reasons why it would have been **obvious** to combine the

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above references for each claim rejected by rejections (i)-(iv) (*See* Office Action, pages 7-9, 11-13). Applicant therefore requests prompt withdrawal of rejections (i)-(iv) because, in each instance, rejections (i)-(iv) are improper.

Despite Examiner's failure to properly reject claims 32, 34-39, and 42-46, Applicant, for purposes of forwarding prosecution, assumes that these rejections were properly asserted under 35 U.S.C. 103. Applicant therefore traverses rejections (i)-(iv) to the extent these assumed rejections may be considered applicable to the amended claims. The applied references fail to disclose or suggest the inventions defined by Applicant's claims and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

The Casati, Humenansky, Charisius, and Ambler references suggest no teaching that cures the deficiencies described above with respect to Knight. For example, Casati describes a system for automatically assigning and dynamically modifying priorities of the work items in order to optimize process execution performance (paragraph [0007]). Casati, however, does not disclose or even contemplate a value modeler software model that calculates a metric of improvement for the process when at least one printed information component associated with the process is digitized by scanning the printed information component to produce a digitally encoded version of the printed information component, as required by Applicant's currently amended independent claim 30. In fact, none of the applied references teach, suggest, or even contemplate the digitalization of a **printed** information component by **scanning the printed** information component to produce a digitally encoded version of the **printed** information component let alone a computer-implemented system that calculates a metric of improvement for the process when at least one printed information component associated with the process is digitized by scanning the printed information component to produce a digitally encoded version of the printed information component and the digitally encoded version of the printed information component is subsequently used within the process in place of the printed information component, as required by Applicant's currently amended claim 30.

For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant's claims 32, 34-39, and 42-46 under any applicable sub-section of 35 U.S.C. 103. As a result, Applicant requests withdrawal of these rejections (i)-(iv).

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CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

By:

December 31, 2007

SHUMAKER & SIEFFERT, P.A.

1625 Radio Drive, Suite 300

Woodbury, Minnesota 55125

Telephone: 651.735.1100

Facsimile: 651.735.1102


Name: Kent J. Sieffert

Reg. No.: 41,312